

Economics of Smoked Fish Marketing in Uyo Metropolis, Akwa Ibom State

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ABSTRACT

This study investigated the costs, profitability, marketing margin and constraints associated with smoked fish marketing in Akwa Ibom State. Data were collected using a structured questionnaire, and purposive sampling technique was adopted in selecting forty (40) respondents. Descriptive statistics, inferential statistics and budgeting approach (gross margin and marketing margin) were used to analyze the data. Weighted mean was used to rank the constraints faced by the smoked fish marketers in the study area. Results showed that 32.50% of the smoked fish marketers were of the age range 30 – 39years, and 100% of the marketers were females. The major constraints faced by these marketers were: high product price, homogeneity of product, poor/inadequate access roads to the central collecting market. From the analysis, the average total cost was N50,029.40/marketer/week; average total revenue was N54,770.00/marketer/week. The marketing margin was 47%. This indicates that smoked fish marketing is profitable in the study area because of the weekly gain. If calculated per annum, it will exceed the annual percentage revenue, estimated as 23%. In order to enhance its productivity, there is therefore need to regulate the activities of the fish trade union, form smoked fish traders cooperative associations and also construct or upgrade market infrastructures and rural feeder roads in the study area. This will add to an increase in the profitability of smoked fish marketing in Uyo metropolis, Akwa Ibom State.

Keywords: Smoked Fish Marketing, Uyo Metropolis.

INTRODUCTION

Fishing has long played an important part in man's economy like other hunting activities. Fish has been a major source of food for humanity by becoming increasingly important since world's population has grown, and the techniques of fish has evolved from prehistoric trap and spear to the artisanal and deep water trawlers today (Neillant *et al.*, 2005).

In Nigeria, fish constitutes 30-40% of protein intake. Fishing provides employment opportunities and income to many rural and urban dwellers in different fields of fishing activities such as production, processing, preservation, transportation and marketing (Eyun *et al.*, 2024). Fish marketing enterprise is an important agricultural domain that must be targeted Roheim and Sutinem (2006) are of the view that seafood is one of the most extensively traded commodity in the world. They noted that export of fish produced from developing countries (Nigeria inclusive, which Akwa Ibom has the highest industry because of its closeness to the coastal region) comprise 20% of agricultural and food processing exports. This is likely to increase as demand for fish produce continues to increase.

Because of the perishable nature of these fish produce, and its increase in demand, marketers have resorted to smoking in order to prolong its shelf life and also help meet high demand. In marketing, smoked fish passes through various market participants and exchange points before they reach the final consumers. These market intermediaries are the wholesalers and retailers who play important roles in the marketing system. At all stages in the marketing chain, the cost of production determine to a greater extent the selling price of the fish. Udoh, (2011) asserted that these costs make a great difference in the price paid by the final consumer at the end of the chain and farm gate price paid to the producers (fishermen) at the beginning of the chain. Nwachukun (2025) defined this price difference as the "marketing margin". Marketing margin is an important indicator of market

efficiency and performance Omeje (2023). If the marketing margin is high, it may be used to argue that the producers and final consumers are being exploited. However, high marketing margin cannot often be fully justified unless the costs involved are fully understood and reasonable.

Despite smoked fish marketing being seen as a lucrative business within the study area, it suffers from several hindrances ranging from shortage in supply to poor marketing infrastructures Udo, Nkeme and Akpan (2020). Notwithstanding the challenges, agencies involved in the marketing of this commodity are increasing by the day. The increase in the concentration of these middle men implies more scope for exploitation of consumers through the imposition of high price tags on the final product and lower price tags for the producers. This study therefore aimed at determining the profitability and marketing margin of smoked fish marketing in Uyo Metropolis of Akwa Ibom State. To determine these, the following research questions were asked:

- i. What are the socioeconomic characteristics of Smoked Fish Marketers in Uyo Metropolis of Akwa Ibom State?
- ii. How wide or narrow is the Marketing Margin of Smoked Fish within Uyo Metropolis.
- iii. How profitable is Smoked Fish Marketing in Uyo Metropolis, Akwa Ibom State.
- iv. What are the Marketing Constraints faced by Smoked Fish Marketers in Uyo Metropolis of Akwa Ibom State.

MATERIALS AND METHODS

The Study Area

The study was conducted in Uyo Metropolis of Akwa Ibom State. Uyo is a city in South-Eastern Nigeria. It is the capital of Akwa Ibom State, a major oil producing state in Nigeria. It is the leading commercial centre in the sub region of Niger Delta. The city became the capital of Akwa Ibom State on September 23rd, 1987 following the creation of the state from the then Cross River State. The population of the state according to the 2006 Nigerian census was 309,573 people (National Population Commission, 2006). The landmass is 115km² (44sqm). Its coordinates are latitude 05^o32'N, and longitude 07^o56'E of the equator. It is made up of two distinct seasons; wet and dry. The wet season is usually from April to October with its peak in June/July, followed by the dry season from November to March (Udoh, 2011). Farming is the predominant occupation of the inter land dwellers where the major land use pattern is characterized by rain fed food crops and livestock rearing, while fishing activities is carried out by the riverine dwellers (Udoh, 2011).

Analytical Technique

In this study, the socioeconomic characteristics of smoked fish marketers were analyzed, using descriptive statistics (mean, frequencies and percentages). The marketing margin and profitability was analysed using the budgeting approach (difference between revenue and cost) while constraints to smoked fish marketing was analysed using inferential statistics. The marketing margin is presented as:

$$\text{Marketing Margin (MM)} = \frac{\text{Retailer's price} - \text{producers' price}}{\text{Retailers' price}} \times \frac{100}{1}$$

The weighted mean of x which was used to rank the constraint was calculated using the formula:

$$(x) = \frac{\sum_{i=1}^n W_i X_i}{\sum_{i=1}^n W_i}$$

$$(x) = \int S [w(t) x (t)] dt$$

Where;

X = weighted mean

dt = change in t

t = time

w = weight

${}^n\Sigma$ = n number of summations

The profitability of smoked fish marketing was calculated using the budgeting approach represented as;

$$\text{Profit } (\pi) = \text{Total Revenue (TR)} - \text{Total Cost (TC)}$$

$$\pi = \text{TR} - \text{TC}$$

$$\pi = \text{TR} - (\text{TFC} + \text{TVC})$$

Where:

π = Profit

TR = Total Revenue

TC = Total Cost

TFC = Total Fixed Cost

TVC = Total Variable Cost

RESULTS AND DISCUSSION

Table 4.1 Socioeconomic Characteristics of Respondents

Sex	Frequency (F)	Percentage (%)
Male	0	0
Female	40	100
Age (years)		
20-29	7	17.50
30-39	13	32.50
40-49	12	30
50-59	8	20
Marital Status		
Single	7	17.50
Married	23	57.50
Widowed	5	12.50
Divorced	5	12.50
Level of Education (Years)		
No formal	5	12.50
FSLC	8	20
SSCE	17	42.5
OND	9	22.5
HND and above	1	2.50
Household Size (Number)		
1-3	11	27.50
4-7	16	40
8-10	8	20
11 and above	5	12.50
Years of Experience		
0-10	5	16
11-20	15.5	12

21-30	25.5	9
31-40	35.5	3
Household Monthly Income (₦)		
5,000-10,000	6	15
10,001-15,000	5	12.50
15,001-20,000	2	5
20,001 and above	27	67.50

Source: Survey field, 2012

The socio economic characteristics of respondents was presented in table 1 and it revealed that all smoked fish marketers were female with a mean age of 40 years. 57.5% of the respondents were married while 17.50% were single. 42.5% had access to formal education and 40% of them had a mean household size of 6 people. With respect to their monthly income, 67.5% of respondents earned from ₦20,000.00 and above, with an average years of experience of 15years.

Table 4.2 Cost Item of Respondents/Week

Items	Cost(N)	Average	Percentage (%)
Fixed cost			
Tax to market authority	23,200	580	51.52%
Knife	6,950	173.75	15.43%
Rope	1,510	115.38	10.25%
Tray	3,850	256.67	22.80%
Total	N35,510.00/wk	1125.80	100%
Variable cost			
Cost of smoked fish	1,845,250	46,131.25	94.33%
Packing cost	12,950	323.75	0.66%
Oil	3,390	199.41	0.41%
Waterproof	9,750	286.76	0.59%
Carton	5,230	237.7	20.49%
Transport to purchase point	27,400	830.3	1.70%
Transport to selling point	32,950	894.42	1.83%
Total	1,936,920	48,903.61	100%
Summary			
Total Fixed Cost (TTC)	35,510	1,125.8	2.24%
Total Variable Cost (TVC)	1,936,920	48,903.06	97.75%
Total Cost (TC)	1,972,430/wk	50,029.40	100%

On cost, the result of the analysis revealed that variable cost occupied 97.75% of the total cost of smoked fish marketing while the remaining 12.25% constituted fixed cost expenses. The total cost was N1,972,430.00 and the total revenue was N2,190,800.00.

Table 4.3 Profit Margin of smoked fish marketing in the study area

Item	Total (N)	Average/Marketer/Wk
Total Revenue	2,190,800	54,770
Total Cost	1,972,430	50,029.40
Profit (TT)	218,370	4,740.60

For profitability, a total cost of N1,972,430.00 was realized by forty (40) smoked fish marketers and N2,190,800.00 as revenue per week. This means that their weekly profit was rated at N218,370.00/week. Thus the average weekly profit for each marketer is N5,459.00/week and about N21,837 per month. This goes to confirm that 67.5% of the respondents earned above N20,000.00 monthly.

In order to calculate the marketing margin, the producers and retailers price was used.

The producers price which is the price that the farmer (producer) actually receives for the product sold either at the farm or the point of production is calculated as

$$\text{Producer price} = \frac{\text{Total Revenue Received by Producer}}{\text{Total quantity sold}} = \frac{2,190,800}{1,769} = 1,238.43$$

The retailers price which is the average price at which the retailer sells the produced to the final consumer, including all costs and mark ups was given as:

$$\begin{aligned} \text{Retailers price} &= \frac{\text{total revenue} + \text{total cost}}{\text{total quantity sold}} \\ &= \frac{2190800 + 1972430}{1769} = 2353.43 \end{aligned}$$

Therefore, the marketing margin was calculated as:

$$\begin{aligned} \text{Marketing margin} &= \frac{\text{Retailer's price} - \text{Producers price}}{\text{Retailers price}} \times \frac{100}{1} \\ &= \frac{2353.43 - 1238.43}{2353.43} \times \frac{100}{1} \\ &= \frac{1115}{2353.43} \times \frac{100}{1} \\ &= 0.4737 \times 100 \\ &= 47.37\% \end{aligned}$$

Constraints to Smoked fish marketing in the Study Area

S/N	Item	SA (4) F	%	A(3)F	%	D(2)F	%	SD (1) F	%	Mean	Rank	Remark
1.	Nature of the product	18	45	13	32.5	6	15	3	7.5	3.15	5	Severe
2.	Seasonality of the product	17	42.5	18	45	1	2.5	4	10	3.2	4	Severe
3.	Homogeneity of the product	22	55	13	32.5	4	10	1	2.5	3.4	2	Severe
4.	Inadequate capital	21	52.5	11	27.5	2	5.0	6	15	3.175	4	Severe
5.	Shortage of supply	4	10	8	20	10	25	18	45	1.95	10	Non-Severe
6.	Poor cost of transportation	15	37.5	17	42.5	7	17.5	1	2.5	3.15	5	Severe
7.	Poor or inadequate access roads to production sites	18	45	18	45	4	10	0	0	3.35	3	Severe
8.	High product price	19	47.5	20	50	1	2.5	0	0	3.45	1	Severe
9.	Bulkiness of the product	12	30	5	12.5	13	32.5	10	25	2.475	8	Non- Severe
10.	Inadequate storage facilities	13	32.5	11	27.5	5	12.5	11	27.5	2.65	6	Severe
11.	Inadequate market regulations and information	13	32.5	12	30	2	5	12	30	2.6	7	Severe
12.	Increased taxation	5	12.5	11	27.5	14	35	10	25	2.275	9	Non- Severe

Source: Field survey, 2012

The study also revealed that high product price was the highest rated constraint to smoked fish marketing, followed by homogeneity of product while the least rated constraint was shortage in supply.

CONCLUSION AND RECOMMENDATIONS

Smoked fish contributes to the diet of majority of households within the study area. Its marketing is regarded as a lucrative business with good profit and as such this study recommends the expansion of the smoked fish marketing industry and efficient utilization of marketing links, channels and information to boost expansion. It is also imperative to monitor the activities of middle men and also provide basic amenities (good roads, transport facilities, markets) that can help improve the business.

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